

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-30 (canceled).

31. (New) A method for manufacturing a magneto-optical recording medium, the method comprising:

applying a first layer on a substrate;

treating the first layer and substrate under a first set of conditions;

forming tracks of said first layer and spaces between the tracks;

thereafter applying a second layer to the tracks of first layer and to the substrate located in the spaces between the tracks of the first layer; and,

thereafter treating the substrate, the first layer, and the second layer under a second set of conditions;

wherein the first set of conditions and the second set of conditions are controlled so that the second layer located on the substrate in the spaces between the tracks has no substantial magneto-optical properties, and the second layer located on the tracks has magneto-optical properties.

32. (New) A method according to claim 31 wherein said first layer is comprised of at least one material selected from the group consisting of spinel ferrite, rutile-type oxide, and hematite.

33. (New) A method according to claim 31 wherein said second layer is comprised of garnet ferrite.

34. (New) A method according to claim 31 wherein the step of applying the first layer on the substrate comprises RF sputtering so that the thickness of the first layer is between about 10 and 100nm.

35. (New) A method according to claim 34 wherein the first set of conditions comprises heating in an atmosphere of about 20% oxygen and about 80% nitrogen for about 10 minutes at about 400 degrees Centigrade.

36. (New) A method according to claim 31 wherein the step of applying a second layer to the tracks of first layer and to the spaces between the tracks of the first layer comprises RF sputtering until the thickness of the second layer is between about 40 and 400nm.

37. (New) A method according to claim 36 wherein the second set of conditions comprises heat treating the substrate, the first layer and the second layer at between about 500 and about 700 degrees Centigrade.

38. (New) A method according to claim 37 wherein the second set of conditions comprises heat treating the substrate, the first layer and the second layer in an atmosphere of about 100% oxygen for about 10 minutes at about 630 degrees Centigrade.

39. (New) A method for manufacturing a magneto-optical recording medium, the method comprising:

applying a first layer on a substrate;

treating the first layer and substrate under a first set of conditions;

forming tracks of said first layer and spaces between the tracks;

thereafter applying a second layer to the tracks of first layer and to the spaces between the tracks of the first layer; and,

thereafter treating the substrate, the first layer, and the second layer under a second set of conditions;

wherein the first set of conditions and the second set of conditions are controlled so that compressive stress in the second layer located on the tracks is reduced by tensile stress in the first layer.

40. (New) A method according to claim 39 wherein said first layer is comprised of at least one material selected from the group consisting of spinel ferrite, rutile-type oxide, and hematite.

41. (New) A method according to claim 39 wherein said second layer is comprised of garnet ferrite.

42. (New) A method according to claim 39 wherein the step of applying the first layer on the substrate comprises RF sputtering so that the thickness of the first layer is about 100nm.

43. (New) A method according to claim 42 wherein the first set of conditions comprises heating in an atmosphere of about 20% oxygen and about 80% nitrogen for about 10 minutes at about 400 degrees Centigrade.

44. (New) A method according to claim 39 wherein the step of applying a second layer to the tracks of first layer and to the spaces between the tracks of the first layer comprises RF sputtering until the thickness of the second layer is about 350nm.

45. (New) A method according to claim 44 wherein the second set of conditions comprises heat treating the substrate, the first layer and the second layer at between about 500 and about 700 degrees Centigrade.

46. (New) A method according to claim 45 wherein the second set of conditions comprises heat treating the substrate, the first layer and the second layer in an atmosphere of about 100% oxygen for about 10 minutes at about 630 degrees Centigrade.

47. (New) A method for manufacturing a magneto-optical recording medium, the method comprising:

applying a first layer on a substrate;

treating the first layer and substrate under a first set of conditions;

thereafter applying a second layer to the first layer; and,

thereafter treating the substrate, the first layer, and the second layer under a second set of conditions;

wherein the first set of conditions and the second set of conditions are controlled so that compressive stress in the second layer is reduced by tensile stress in the first layer.

48. (New) A method according to claim 47 wherein said first layer is comprised of at least one material selected from the group consisting of spinel ferrite, rutile-type oxide, and hematite.

49. (New) A method according to claim 47 wherein said second layer is comprised of garnet ferrite.

50. (New) A method according to claim 47 wherein the step of applying the first layer on the substrate comprises RF sputtering so that the thickness of the first layer is about 100nm.

51. (New) A method according to claim 50 wherein the first set of conditions comprises heating in an atmosphere of about 20% oxygen and about 80% nitrogen for about 10 minutes at about 400 degrees Centigrade.

52. (New) A method according to claim 47 wherein the step of applying a second layer to the first layer comprises RF sputtering until the thickness of the second layer is about 350nm.

53. (New) A method according to claim 52 wherein the second set of conditions comprises heat treating the substrate, the first layer and the second layer at between about 500 and about 700 degrees Centigrade.

54. (New) A method according to claim 53 wherein the second set of conditions comprises heat treating the substrate, the first layer and the second layer in an atmosphere of about 100% oxygen for about 10 minutes at about 630 degrees Centigrade.